



## Key Considerations from Primer

The program must play an essential role to report on this measure. An essential role is one that would be described by stakeholders and partners as essential for the project's ultimate success.

When a program has a non-essential role, describe the the project's impacts or accomplishments in narrative form for the annual report but do not include these the performance measures and metrics.

- ▶ Not everything needs a number
- ▶ Count what you can count
- ▶ Sometimes a story is best
- ▶ If it's too complicated, report it as an Impact or Accomplishment
- ▶ Do not seek out nor shy away from large numbers. Larger benefits are ok but should be reviewed with added rigor
- ▶ Do not use multipliers
- ▶ Include citations in reporting to enhance clarity, defensibility, and transparency.

## Workshops and Trainings<sup>1</sup>

Many Sea Grant programs offer a wide range of workshops and job trainings that provide continuing education units (CEUs) for educators, certifications for a variety of job types, or new knowledge and skills. You can apply this methodology guide to a number of Sea Grant workshops, trainings, or courses. We can measure the economic value of the course using a proxy of what attendees are willing to pay to attend—i.e., attendees (or the organizations paying for the attendees) choose to pay because they see the value of the knowledge, skills, and other benefits as outweighing the cost. Additionally, for workshops or trainings involving required certifications or CEUs, Sea Grant programs can use this guide to calculate the supplemental impact of the cost savings for attendees. We recognize that Sea Grant workshops and trainings offer many important benefits. For example, they may also create or support jobs. In this case, please refer to the “Job and Business Support and Creation” methodology guide for additional information.

### Examples

Here are some slightly modified examples of workshops and trainings reported to Sea Grant's Planning, Implementation, and Evaluation Resources (PIER)<sup>2</sup> database. For each example, we provide our thoughts on what the Sea Grant program did well and what could be improved. These generally focus on the cost savings from the offering. The recommended methodology that follows this section will also include the economic value of the offering based on what one is willing to pay.

- 1** Sea Grant held a series of workshops, symposia, and one-on-one training for educators. These included courses for which educators were able to obtain CEUs. Because of the Sea Grant education program, educators incurred no costs for gaining the additional capacity they require to teach science principles aligned with state and federal standards. Moreover, they could garner CEUs that help them gain career advancement, promotions, and higher salaries.
  - ✔ Sea Grant explained how it benefitted educators by providing a free training and explicit cost savings. Additionally, the story is strengthened by the added qualitative benefit of career advancement through CEUs.
  - ✘ It would be more compelling to state how many educators participated in these programs and the cost of other comparable programs to illustrate X number of educators saved \$Y.
- 2** Sea Grant fully supports a Master Naturalist Program. The total cost of the Master Naturalist course (with CEUs) is \$240, and course completion qualifies participants for 4 CEU credits (\$60 per CEU). Another entity offers a similar plant ID course that costs \$1,195 and is worth 3 CEUs (\$398.33 per CEU). Therefore, if you calculate savings on a per CEU basis ( $(\$398.33 - \$60) * 4 \text{ CEUs} * 13 \text{ participants}$ ), the Master Naturalist Program offered \$17,593.16 in comparable savings.
  - ✔ Sea Grant clearly documented the measurable change—cost savings compared to other programs. The calculation is also presented clearly.
  - ✘ It would be a more complete story to state who the participants (e.g. homeowners, landscapers, etc.) were and why they need CEUs.

1. This methodology guide was developed to help Sea Grant and other coastal engagement programs calculate and characterize the economic benefits and impacts of their program activities. This methodology guide is a tool and does not constitute official guidance from the National Sea Grant Office for reporting economic benefits and impacts.

2. Sea Grant programs use PIER to submit their impacts, accomplishments, performance measures, and metrics to the National Sea Grant Office.

3 Sea Grant held a series of workshops, symposia, and one-on-one trainings for coastal community planners and managers. The economic benefit provided to these communities reflects the training costs that the various municipalities would have incurred if they had hired consultants to help them understand and use the complex modeling and mapping tools to assess their vulnerabilities to coastal change.

✓ Sea Grant documented how they provided a lower-cost option to coastal community planners and managers.

✗ It would be more transparent and defensible to state the cost of the Sea Grant workshops, symposia, or one-on-one trainings, and compare it to the cost of similar non-Sea Grant programs. This would have allowed for an explicit cost-savings calculation.

## Present Your Story as a Value Chain

Value chains illustrate the sequence of events or activities that result in an economic impact or benefit. Consider developing a value chain diagram to help you tell a compelling and defensible story about how your Sea Grant program, product, or service generated a measurable result.



The methodology below covers two benefit calculations. For Part 1, using travel cost as a proxy for the value of the course, we created the following value chain:

Let's modify one of the earlier examples to illustrate how to create a compelling value chain. *Sea Grant fully supports the Master Naturalist Program [the program/product/service]. Participants [what was affected] attended the Master Naturalist course to obtain CEUs and other benefits [what was done to get impact]. The Master Naturalist Program provided an economic benefit of at least \$5,763 [societal benefit] based on the travel cost, program cost, and lost opportunity to earn wages or lost labor for the attendees' organization as a proxy to measure the minimum value of this benefit. The total cost of the Master Naturalist course (with CEUs) is  $\$240 * 13 \text{ people} = \$3,120$  in CEUs; 13 people traveled an average of 40 miles \*  $\$0.545 \text{ per mile} = \$283$ ; and the opportunity cost of the wages were  $\$22.69 * 13 * 8 \text{ hours to attend and travel} = \$2,360$  [measurable change] [calculation for defensibility].*



For Part 2, cost savings for CEUs or required certification or courses, we created the following value chain:

*Sea Grant fully supports the Master Naturalist Program [the program/product/service]. Participants [what was affected] completed the Master Naturalist course (with CEUs) for a significantly lower cost than what was offered by comparable programs [what was done to get impact]. The Master Naturalist Program offered \$17,593.16 in comparable savings [societal economic impact]. The total cost of the Master Naturalist course (with CEUs) is \$240, and completion of the course qualifies participants for 4 CEU credits (\$60 per CEU). Another entity offers a similar plant ID course that costs \$1,195 and is worth 3 CEUs (\$398.33 per CEU) [measurable change]. Therefore, the savings can be calculated as  $(\$398.33/\text{CEU other program} - \$60/\text{CEU Sea Grant}) * 4 \text{ CEUs} * 13 \text{ participants}$  [calculation for defensibility].*



## Recommended Methodology and Best Practices

**Recommended Methodology:** Part 1: Estimate economic benefit of offering based on travel cost and time to attend. Part 2 (if applicable for CEU or required certifications only): Calculate cost savings compared to obtaining certification or CEUs elsewhere.

**Description:** Part 1 of this method captures the economic value of the offering based on what attendees are willing to pay in terms of the cost to get there, cost of the offering, and value of their time. Part 2 of this method also captures additional cost savings compared to similar programs that provide the same required certifications or CEUs. Part 1 can be implemented for all workshops, trainings, or courses, as it is justified by attendees giving up their time and paying to get to the offering. This can be communicated as an economic benefit. **Part 2 should only be implemented if** the certification, CEUs, or course are required, and Sea Grant provides cost savings over other options. This can be communicated as cost savings.

### Key Steps and Best Practices:

#### Part 1: Calculate the cost to travel and attend the workshop or training.

You can calculate this part for all types of workshops and trainings. This represents the minimum willingness to pay for your offering, as the attendees or the attendee's employer feels the benefit from this workshop or training justifies the investment.

1. Calculate the travel cost paid by all attendees.
  - Transportation costs and vehicle travel: If possible, it is best to gather attendees' transportation costs and miles traveled for defensibility and transparency. In the absence of data, estimate these values using the General Services Administration's (GSA's) privately owned vehicle mileage reimbursement rate (\$0.545 per mile in 2018).
  - Hotels and food (if applicable): In the absence of actual rates incurred, the [GSA per-diem lookup](#) rate can help you find defensible rates for hotels if your training or workshop lasts multiple days and requires these expenses.
2. Calculate the total cost (e.g., fee to attend a workshop, all travel costs) paid by all attendees.
3. Calculate the value of the attendee's time (i.e., the time that attendees are willing to give up to attend when they could be doing something else or working for their employer).
  - Include the number of hours of your workshop or training, and the number of hours it takes to travel there and back.
  - Sum these hours up across all attendees.
  - Select a median hourly wage. See the [Bureau of Labor Statistics State Occupational Employment and Wage Estimates](#) webpage and click on your state. Select the "median hourly wage" for "all occupations" (if you do not know the occupation of all your attendees, or if you have a large mix of occupations across attendees). If your attendees are primarily from a specific occupation, use the appropriate median hourly wage from that occupation.

Occupation code	Occupation title (click on the occupation title to view its profile)	Level	Employment	Employment RSE	Employment per 1,000 jobs	Location quotient	Median hourly wage	Mean hourly wage	Annual mean wage	Mean wage RSE
00-0000	All Occupations	total	3,619,640	0.6%	1000.000	1.00	\$24.14	\$31.58	\$65,680	0.6%
11-0000	Management Occupations	major	306,380	1.0%	84.643	1.54	\$56.96	\$65.02	\$135,250	0.7%
11-1011	Chief Executives	detail	7,810	3.3%	2.159	1.54	(5)	\$105.56	\$219,550	1.3%
11-1021	General and Operations Managers	detail	82,190	1.5%	22.706	1.39	\$55.89	\$66.28	\$137,870	1.0%

- Calculate the loaded hourly wage” with the following third-level bullet:
  - See the [BLS Employer Costs for Employee Compensation News Release](#). The link provided should always display the most current, up-to-date information. Scroll down to the bottom of the page and select “Table 1. By Ownership.
  - Determine whether the majority of attendees were primarily civilian, employed by private industry or state and local government. Once you make this determination, select the corresponding “Cost(\$)” and take the value for “Total benefits” (see figure below). Add the total benefits figure to the median hourly wage identified in Step 3. This is now your **loaded hourly** wage (for the corresponding occupation). You might have multiple loaded hourly wages depending on how many occupation codes you select.

**Economic News Release** ECT PRINT:

**Table 1. By ownership**

**Table 1. Employer Costs for Employee Compensation by ownership**  
[Mar. 2020]

Compensation component	Civilian workers <sup>(1)</sup>		Private industry workers		State and local government workers	
	Cost (\$)	Percent of compensation	Cost (\$)	Percent of compensation	Cost (\$)	Percent of compensation
Total compensation <sup>(2)</sup>	37.73	100.0	35.34	100.0	52.45	100.0
Wages and salaries	25.91	68.7	24.82	70.2	32.62	62.2
Total benefits	11.82	31.3	10.53	29.8	19.82	37.8
Paid leave	2.76	7.3	2.58	7.3	3.89	7.4
Vacation	1.34	3.6	1.32	3.7	1.46	2.8
Holiday	0.82	2.2	0.77	2.2	1.11	2.1

Loaded hourly wage is the total compensation employers pay their employees. The loaded hourly wage includes the employee’s hourly wage, plus benefit expenses incurred by the employer, like sick leave, vacation time, and other benefits.

4. Communicate this as the economic benefit of your offering, as attendees or their employers are willing to pay this because they value the benefit of your offering more than the cost.



## Part 2: Determine additional cost savings for certifications, CEUs, or other required courses.

Sea Grant offerings that are cheaper than other offerings provide an additional economic impact: cost savings to the attendees obtaining the CEUs, certification, or something similar. If attendees are **REQUIRED to obtain a certification, CEUs, or something similar**, AND your offering is **cheaper than available options**, calculate this as an additional cost savings for only the participants obtaining the certification or CEUs. If your offering is not required or does not provide cost savings relative to similar certifications or CEUs, **do not implement this calculation**.

1. Determine the cost of other courses, preferably within your state, that offer CEUs or a similar certification.
  - Try to find two or three similar trainings, workshops, or courses, so it does not look like you are selecting the one with the highest cost.
2. Determine the cost of these other courses on a per CEU basis, cost to achieve certification basis, or some other unit that allows for a direct comparison with your program.
  - Use an average of two or three other courses if available.
3. Determine the cost of your course on a similar CEU basis, cost to achieve certification basis, or some other unit of comparison that applies to your situation.
  - For example: \$450 for 3 CEUs = \$150/CEU
4. Subtract the per-unit cost of your course from that of the other course.
  - For example: \$500/CEU [other course] - \$150/CEU [Sea Grant course] = \$350/CEU savings
5. Calculate the total cost savings by multiplying the per unit savings in step 4 by the number of CEUs or certifications participants received.
  - For example: \$350/CEU savings \* 45 participants getting CEUs \* 3 CEUs per participants = \$47,250.
6. Communicate this as cost savings compared to achieving similar certifications.

## Factors to Consider in Communicating Benefits

You should consider the following differences when reporting your economic impact or benefit to Sea Grant's PIER database versus communicating its value in other outreach pieces (e.g., fact sheets, websites, impact statements, accomplishment statements).

	Performance Measure Reporting in PIER	Impact Statements and Other Outreach
Recurring Benefits	If the trainings or workshops occur annually, it is appropriate to claim them each year.	
Attribution	Avoid double counting when <b>multiple Sea Grant Programs are involved</b> . Multiply the final \$value by the fraction of your level of effort (LOE) divided by total <b>Sea Grant LOE</b> (e.g., you provided 400 hours, Sea Grant program 2 provided 600 hours, and another organization provided 500 hours). Multiply the final \$value by 40% (i.e., your 400 hours / <b>1,000 total Sea Grant hours</b> [600 + 400]). The other Sea Grant program will multiply by 60%. Together, the two Sea Grant programs are now claiming they were essential contributors to the full \$value (without double counting). Note, the Sea Grant programs are claiming they were an essential contributor to the full value, but not the only contributors to this full value.	There is generally no need to attribute the value of your contribution; simply state you played an essential role in a project that provided \$X in savings to participants and ensure your role is transparent and well-described to tell an effective story. <b>If</b> you need to attribute your LOE for outreach, use your percent LOE as a rough estimate (e.g., Sea Grant contributed 300 hours out of a total 1,000 hours, so it contributed 30 percent).
Very Large Benefits	This methodology is unlikely to result in extremely large numbers that would lead to scrutiny.	

## Tools for Implementation

As noted in the methodology, BLS provides the following databases on median annual income:

- [State Occupational Employment and Wage Estimates](#)
- [National Occupational Employment and Wage Estimates](#)
- [BLS Employer Costs for Employee Compensation News Release](#)

General Services Administration (GSA) provides the following database on per-diem travel rates:

- <https://www.gsa.gov/travel/plan-book/per-diem-rates>

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These guides are reference tools only and do not constitute formal performance measure or reporting guidance.

Please contact [oar.sg.info-admin@noaa.gov](mailto:oar.sg.info-admin@noaa.gov) with any reporting questions.